Abstract

A group is formed from appliances permitted by a user, to realize safe communication between appliances joining to the group. A group management processing unit 302 generates an encryption key used for cipher communication within the group, and stores the encryption key together with information required for cipher communication into its own storage unit and into a storage medium. An appliance that acquires the information required for cipher communication, by means of the storage medium, uses the information to send information on the appliance itself and the information required for cipher communication to the other appliances. When an appliance is to leave the group, the appliance deletes the information required for cipher communication, which the appliance itself holds, and notifies its leave to the other appliances, so that those appliances delete information on the leave appliance, which is held in those appliances.